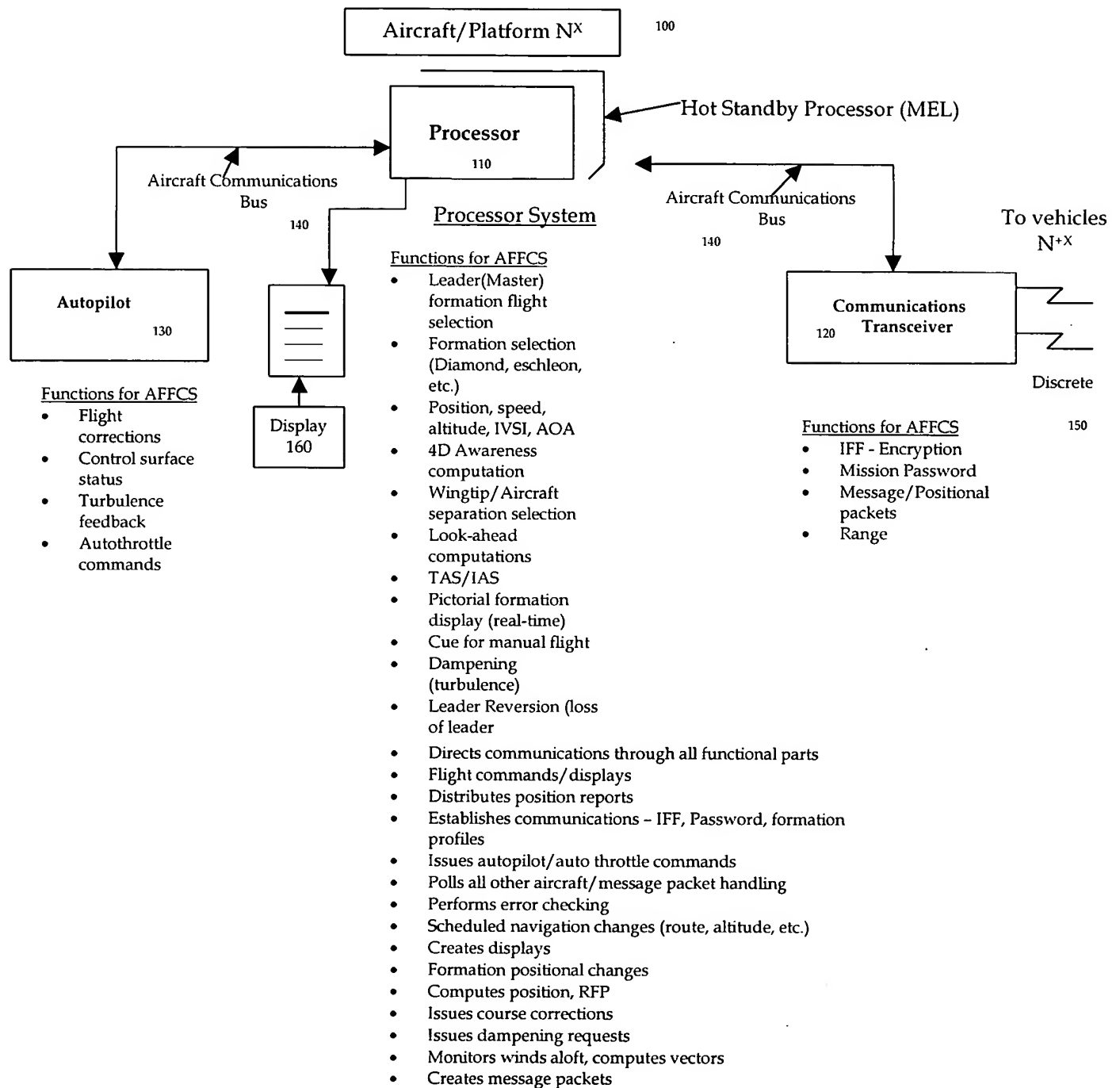


Automatic Formation Flight Control System - AFFCS

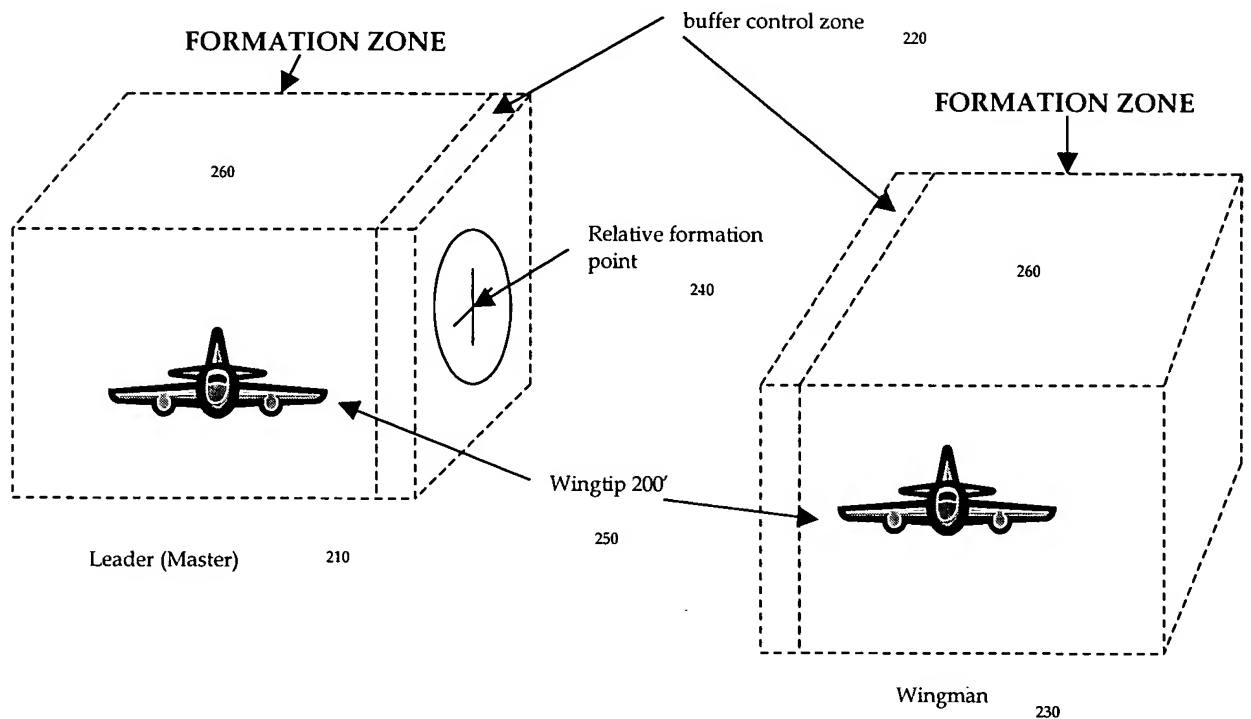
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Functional Block Diagram (Typical)



AFFCS Functional Block Diagram - Figure 1

AFFCS - Formation Zone Geometry



AFFCS Formation Zone

- Four corner positional computations with center formation point calculated – may be more than one surface of the formation zone
- buffer box calculated with similar center formation point dependent on formation selected – up to six axes
- Position, speed, IAS, altitude separation, look ahead trending, buffer trending, turbulence dampening
- Communications with other aircraft/vehicles
- 4D comparisons and display in cockpits

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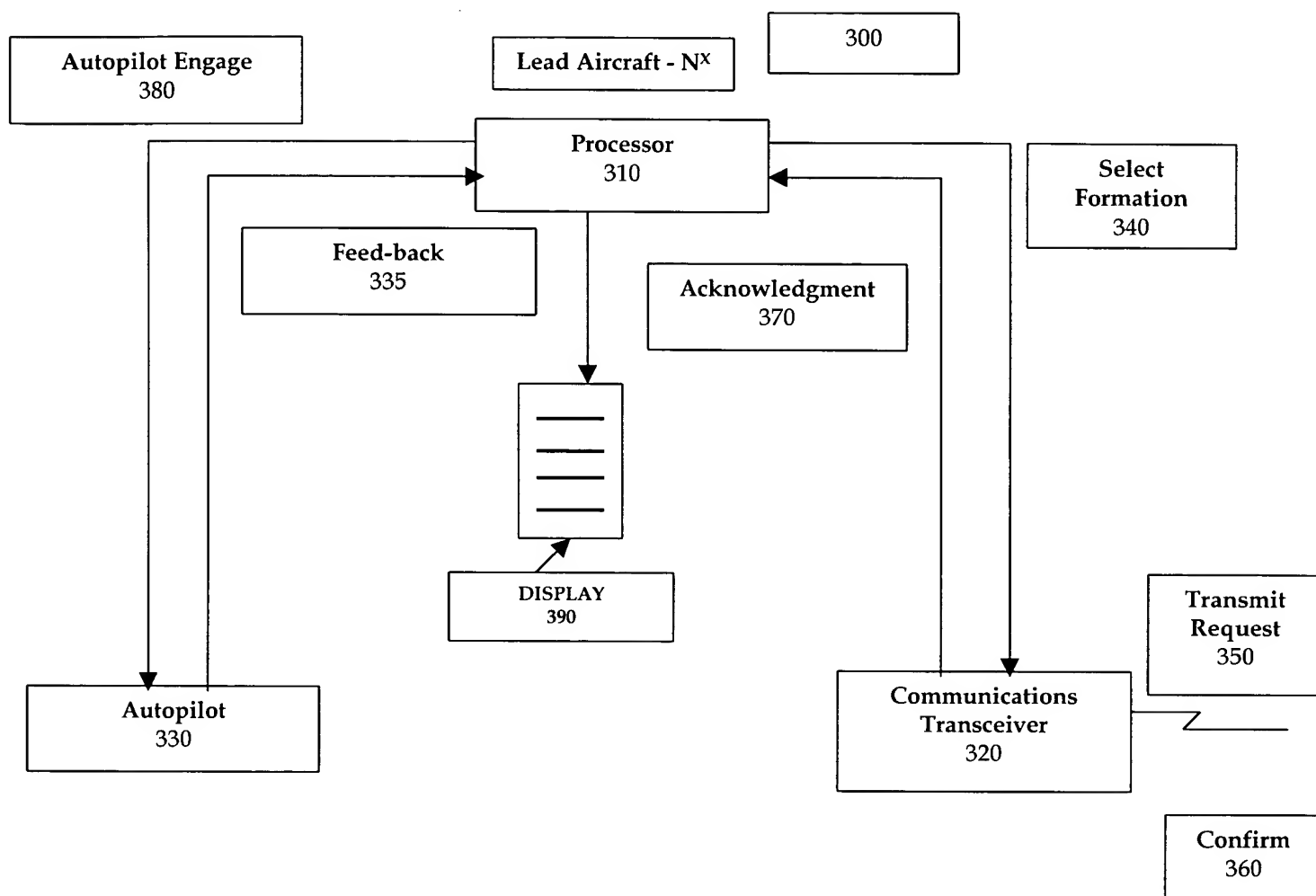
AFFCS -Formation Zone Geometry - Figure 2

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Control Process Transaction (Typical)

Initiation of Formation



AFFCS Control Process Transaction -Initiation
of Formation- Figure 3